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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/755,047	01/08/2001	Takuji Goda	K-1951	6751

7590 06/18/2002

KANESAKA AND TAKEUCHI
1423 Powhatan Street
Alexandria, VA 22314

EXAMINER

PIZIALI, ANDREW T

ART UNIT	PAPER NUMBER
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1775

DATE MAILED: 06/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/755,047

Applicant(s)

GODA ET AL.

Examiner

Andrew T Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Information Disclosure Statement

1. The Information Disclosure Statements, filed 4/5/2001 and 3/14/2002, have been considered. Two of the documents cited in the IDS submitted on 4/5/2001 are found on the IDS submitted on 3/14/2002. The examiner has crossed out the second citing of these references to avoid confusion. Two initialed PTO-1449 forms are enclosed with this Office Action.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 6-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant claims that an electrode film is formed on the insulating film, but does enable one skilled in the art to use the electrode film. The specification only teaches that an electrode film, if necessary, may be formed on the insulating film (page 6, lines 13-15). It is not clear why the electrode film may necessarily be present, or what function the electrode film performs.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,808,715 to Tsai et al.

Regarding claims 1-5, Tsai discloses a liquid crystal display glass article comprising an alkali-containing glass substrate, a TiO_2 - SiO_2 composite under layer, an ITO layer, and a TiO_2 - SiO_2 insulating film in that enumerated order (column 4, lines 15-32).

Regarding claims 4-5, Tsai does not mention the surface electrical resistance of the insulating film, but considering that the insulating film comprises a highly resistant composite of TiO_2 - SiO_2 (column 4, lines 15-32 and column 6, lines 16-18), and since the material is substantially identical to the material suggested by the applicant (see applicants' specification on page 11, lines 10-13), the film would inherently possess an electrical resistance within the range of 1.0×10^6 to $1.0 \times 10^{16} \Omega$ even after a heating process at 550C for 1 hour.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,808,715 to Tsai et al. and in view of US Patent No. 6,034,474 to Ueoka et al.

Tsai does not mention forming an electrode film on the liquid crystal display glass article, but Ueoka discloses that it is known in the art of liquid crystal/plasma displays to deposit a silver layer on the surface of a glass article comprising a glass substrate and ITO layer, to form an electrode bus that enables the electrode to have a lowered electrical resistance (column 1, lines

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31-47). It would have been obvious to one having ordinary skill in the art at the time the invention was made to deposit a silver layer on the glass article of Tsai, because the silver layers form an electrode bus that enables the electrode to have a lower electrical resistance.

8. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,808,715 to Tsai et al. and in view of US Patent No. 5,548,186 to Ota.

Tsai does not mention forming an electrode film on the liquid crystal display glass article, but Ota discloses that it is known in the art of liquid crystal/plasma displays to deposit a silver layer on the surface of a glass article comprising a glass substrate and transparent conductive film such as tin oxide, to form an electrode bus that lowers the electrical resistance of the article (column 1, lines 12-26 and column 3, lines 1-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to deposit a silver layer on the glass article of Tsai, because the silver layers form an electrode bus that lowers electrical resistance of the glass article.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew Piziali whose telephone number is (703) 306-0145 and whose fax number is (703) 746-7037. The examiner can normally be reached Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached at (703) 308-3822. The fax numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5665.



atp

June 6, 2002



DEBORAH JONES
SUPERVISORY PATENT EXAMINER